DANNY SIU

https://dannysiudata.com
dsiucareer@gmail.com
(817) 320-7283

EDUCATION

University of Texas at Austin / M.S. in Computer Science
Aug. 2023 - Present
○ Notable coursework: Deep learning, Machine Learning, Natural Language Processing, Artificial Intelligence, Optimization

University of California at Berkeley / B.A. in Data Science
National Merit Scholar
○ Notable coursework: Artificial Intelligence, Machine Learning, Data Analytics, Algorithms, Data Structures, Data Mining

CERTIFICATIONS

AWS Certified Solutions Architect Associate — Jan 2025, Amazon Web Services
Oracle Cloud Infrastructure Generative AI Professional — Jun 2024, Oracle Corporation
Oracle Cloud Infrastructure AI Certified Foundations Associate — Jun 2024, Oracle Corporation

EXPERIENCE

Smarsh / Software Engineer
Remote / Jun. 2021 - Jul. 2023

○ Integrated new features into Smarsh's Conduct Surveillance application, utilizing pre-trained NLP and ML models to identify misconduct in electronic and voice communications for major global financial institutions.
○ Resolved 8 production issues escalated from the support team, evoking company recognition and improving relationships with 3 major at-risk banking clients.
○ Constructed more robust & comprehensive Groovy testing for 7 transformers and 12 pipelines used in production.
○ Collaborated with product managers and software engineers to optimize the Jira workflow, eliminating blockers and enhancing team productivity.
○ Strengthened code quality through regular code reviews and documentation for both new and existing features.

University of California at Berkeley / Researcher for the Cohen Research Group
Berkeley, CA / Feb. 2019 - Aug. 2019

○ Launched efforts to replace an expensive climate model run with ML model predictions, improving efficiency.
○ Engineered geolocation data to enhance the resolution of NO2 level measurements recorded by NASA's Aura satellite.
○ Aligned 47K pixels with Aura's OMI pixels, enabling tailored geographical data correlation for ML model development.

University of Texas at Austin / Researcher in Computational Chemistry
Austin, TX / Jun. 2016 - Aug. 2016
○ Simulated carbon monoxide binding on gold-palladium alloy nanoparticles during oxygen reduction reactions (ORR).
○ Created molecular visualizations to communicate research findings on energy production efficiency in catalyst materials.

PROJECTS

Additional projects available at: **dannysiudata.com**

POS-Tagger Model / Python, PyTorch, Seaborn
○ Trained an LSTM for POS-tagging using mini-batch stochastic gradient descent on pre-trained GloVe embeddings.
○ Improved model accuracy by implementing a bi-directional LSTM, adding dropout layers, and utilizing the 500,000 most common 300-dimensional word embeddings.

SKILLS

Languages: Python, Java, SQL, Groovy, R, PyTorch, Tensorflow, Keras, Scikit-learn, Pandas, Matplotlib, Seaborn, HTML
Tools and Frameworks: Linux, Git, Tableau, Agile, Jira, Kanban, Jupyter, Excel, MS Office, Bash
Data Modeling Expertise: Deep Learning, Neural Networks, Machine Learning, Data Visualization, Feature Engineering, Clustering, Classification, Prediction, Sentiment analysis, Data analytics